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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,961	01/22/2002	Alain Guesdon	218153US6X	5622

22850 7590 03/17/2004

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EXAMINER

GORMAN, DARREN W

ART UNIT	PAPER NUMBER
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3752

DATE MAILED: 03/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/050,961

Applicant(s)

GUESDON, ALAIN

Examiner

Darren W Gorman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 16-20 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3, 4, 6.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Information Disclosure Statement*

2. The IDS filed on April 12, 2002, paper #3, and the three lists of related cases filed on April 12, 2002, paper #3, April 29, 2002, paper #4, and March 24, 2003, paper #6, are hereby acknowledged and have been placed of record. Please find attached a signed and initialed copy of the PTO 1449 and each of the lists of related cases.

### *Specification*

3. The disclosure is objected to because of the following informalities:  
On page 12, line 11, [6] should be changed to --3--.  
Appropriate correction is required.

### *Minor Claim Suggestions By Examiner*

4. The body of the claims of the present invention is understood by the Examiner, however the following changes are recommended to improve clarity. The claims have been examined on the merits including the suggested changes below.

In claim 8, line 3, [parallelogramm] should be changed to --parallelogram--.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3, 5, 7-9, 16, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Thorstensson, USPN 5,375,767.

Thorstensson shows an agricultural sprayer (10) (see Figure 1) equipped with a chassis, the chassis comprising: a bearing structure supporting a storage device (14), and a connecting structure comprising a single upright (20), the upright directed in a vertical direction and supporting a spreading device (26), wherein the upright is connected to a system (30) of the spreading device, the system comprising a parallelogram (34, 36, 44, 46) (see Figure 2), wherein the bearing structure comprises a straight single stringer (12), wherein the chassis rests on the ground by a ground-connection device (including 16, 17), wherein the chassis is connected to a tractor vehicle by a hitching device comprising a hitching head (18), and wherein the hitching head is connected directly to the stringer (see Figure 1).

7. Claims 1-3, 5-7, 9, 16, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Penson, USPN 4,602,742.

Penson shows an agricultural sprayer (10) (see Figures 1 and 2) equipped with a chassis, the chassis comprising: a bearing structure supporting a storage device (12), and a connecting structure comprising a single upright (53) directed in a vertical direction and arranged in a

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vertical mid-plane of the sprayer and supporting a spreading device (83), wherein the bearing structure comprises a straight single stringer (14) arranged in a vertical mid-plane of the sprayer, wherein the chassis rests on the ground by a ground-connection device (including 19), wherein the chassis is connected to a tractor vehicle by a hitching device comprising a hitching head (17), and wherein the hitching head is connected directly to the stringer (see Figures 1 and 2).

*Claim Rejections - 35 USC § 103*

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thorstensson.

Thorstensson shows all of the claimed limitations as set forth in claim 1, however the disclosure of Thorstensson is silent as to whether the stringer is made using a hollow section piece.

It is common and well known in the art to construct chassis members of trailers from hollow materials (usually steel) for the purpose of saving raw materials, and for the purpose of weight reduction, since additional weight requires more energy to tow.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the stringer of Thorstensson using a hollow section piece in order to save raw materials and reduce the overall weight of the trailer.

10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Penson.

Penson shows all of the claimed limitations as set forth in claim 1, however the disclosure of Penson is silent as to whether the stringer is made using a hollow section piece.

It is common and well known in the art to construct chassis members of trailers from hollow materials (usually steel) for the purpose of saving raw materials, and for the purpose of weight reduction, since additional weight requires more energy to tow.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the stringer of Penson using a hollow section piece in order to save raw materials and reduce the overall weight of the trailer.

11. Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thorstensson, in view of Mueller et al., USPN 6,209,895.

Thorstensson shows all of the claimed limitations as set forth in claim 9, however the apparatus of Thorstensson does not expressly disclose a suspension system for the apparatus, wherein the ground-connection device comprises a trailed arm connected to the chassis by articulation, the articulation arranged in a vertical mid-plane of the sprayer, and wherein the ground-connection device comprises an active element (oleopneumatic ram) entailing just one anchoring point on the chassis, the anchoring point lying inside the stringer.

Mueller teaches an axle suspension system (see Figure 1; and column 2, lines 15-33) which can be used for a trailer chassis comprising a trailed arm (17) connected to a chassis stringer by an articulation (21), the articulation arranged in a vertical mid-plane of the sprayer,

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wherein the suspension system comprises an active element (29) entailing just one anchoring point on the chassis, the anchoring point lying inside the stringer (see Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the suspension system of Mueller, into the agricultural sprayer trailer chassis of Thorstensson, in order to more efficiently transfer stresses between the ground-connection device and the chassis.

With regard to the limitation of the active element being an “oleopneumatic ram”, although the suspension system of Mueller is silent to the type of shock absorber which can be used in the system, Applicant has not disclosed a criticality in using specifically an “oleopneumatic ram” type shock absorber, therefore, it would have been obvious to one of ordinary skill in the art to employ an oleopneumatic ram, or any other well known mountable shock absorber (i.e. hydraulic, pneumatic, etc.) with the suspension system in order to efficiently transfer stresses between the ground-connection device and the chassis to minimize or prevent damage.

12. Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Penson, in view of Mueller et al., USPN 6,209,895.

Penson shows all of the claimed limitations as set forth in claim 9, however the apparatus of Penson does not expressly disclose a suspension system for the apparatus, wherein the ground-connection device comprises a trailed arm connected to the chassis by articulation, the articulation arranged in a vertical mid-plane of the sprayer, and wherein the ground-connection

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device comprises an active element (oleopneumatic ram) entailing just one anchoring point on the chassis, the anchoring point lying inside the stringer.

Mueller teaches an axle suspension system (see Figure 1; and column 2, lines 15-33) which can be used for a trailer chassis comprising a trailed arm (17) connected to a chassis stringer by an articulation (21), the articulation arranged in a vertical mid-plane of the sprayer, wherein the suspension system comprises an active element (29) entailing just one anchoring point on the chassis, the anchoring point lying inside the stringer (see Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the suspension system of Mueller, into the agricultural sprayer trailer chassis of Penson, in order to more efficiently transfer stresses between the ground-connection device and the chassis.

With regard to the limitation of the active element being an “oleopneumatic ram”, although the suspension system of Mueller is silent to the type of shock absorber which can be used in the system, Applicant has not disclosed a criticality in using specifically an “oleopneumatic ram” type shock absorber, therefore, it would have been obvious to one of ordinary skill in the art to employ an oleopneumatic ram, or any other well known mountable shock absorber (i.e. hydraulic, pneumatic, etc.) with the suspension system in order to efficiently transfer stresses between the ground-connection device and the chassis to minimize or prevent damage.

13. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thorstensson, in view of Clement, USPN 1,471,548.



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Thorstensson shows all of the claimed limitations as set forth in claim 17, however Thorstensson does not expressly teach the agricultural sprayer wherein the hitching head is connected to the stringer by an articulation, wherein a pivoting of the hitching head with respect to the stringer about the articulation is damped using damping elements, the damping elements being arranged inside the stringer.

Clement shows a trailer (see Figures 1-3; and page 1, lines 82-97) having a hitching head (6) connected to a stringer (no reference number) by an articulation (5), wherein a pivoting of the hitching head with respect to the stringer about the articulation is damped using damping elements (20, 21) arranged inside the stringer.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the hitching head/stringer connection of Thorstensson, to include an articulation and damping elements, as taught by Clement, in order to efficiently transfer shocks and stresses between the hitching head and the stringer of the chassis to minimize or prevent damage.

14. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Penson, in view of Clement, USPN 1,471,548.

Penson shows all of the claimed limitations as set forth in claim 17, however Penson does not expressly teach the agricultural sprayer wherein the hitching head is connected to the stringer by an articulation, wherein a pivoting of the hitching head with respect to the stringer about the articulation is damped using damping elements, the damping elements being arranged inside the stringer.

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Clement shows a trailer (see Figures 1-3; and page 1, lines 82-97) having a hitching head (6) connected to a stringer (no reference number) by an articulation (5), wherein a pivoting of the hitching head with respect to the stringer about the articulation is damped using damping elements (20, 21) arranged inside the stringer.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the hitching head/stringer connection of Penson, to include an articulation and damping elements, as taught by Clement, in order to efficiently transfer shocks and stresses between the hitching head and the stringer of the chassis to minimize or prevent damage.

#### *Allowable Subject Matter*

15. Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### *Conclusion*

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patents to Anderson and Thompson et al. are cited as of interest.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darren W Gorman whose telephone number is 703-306-4205. The examiner can normally be reached on M-F 8:00-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on 703-308-2087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Darren W Gorman  
Examiner  
Art Unit 3752

*DWG* 3/12/04  
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March 12, 2004

  
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